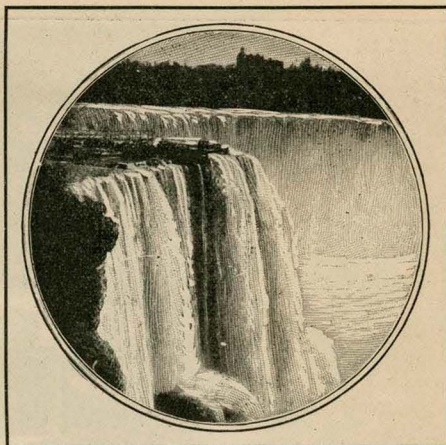
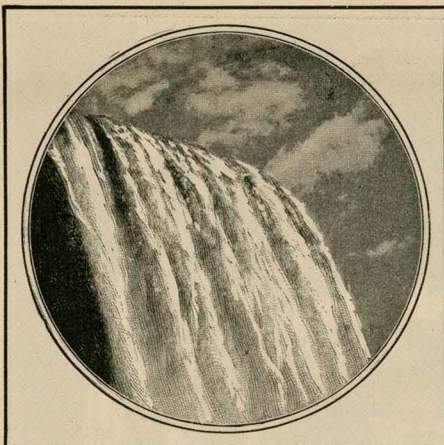


[1901]



THE PASSING OF NIAGARA

BY MARY B. HARTT

TWO centuries and more ago, when Father Hennepin first came upon the "grand sault" of Niagara, it was set in a green solitude. Eagles, nesting in the high cedar-tops, circled screaming through the mists of the "Thunder of Waters." And only the Red Man saw and wondered.

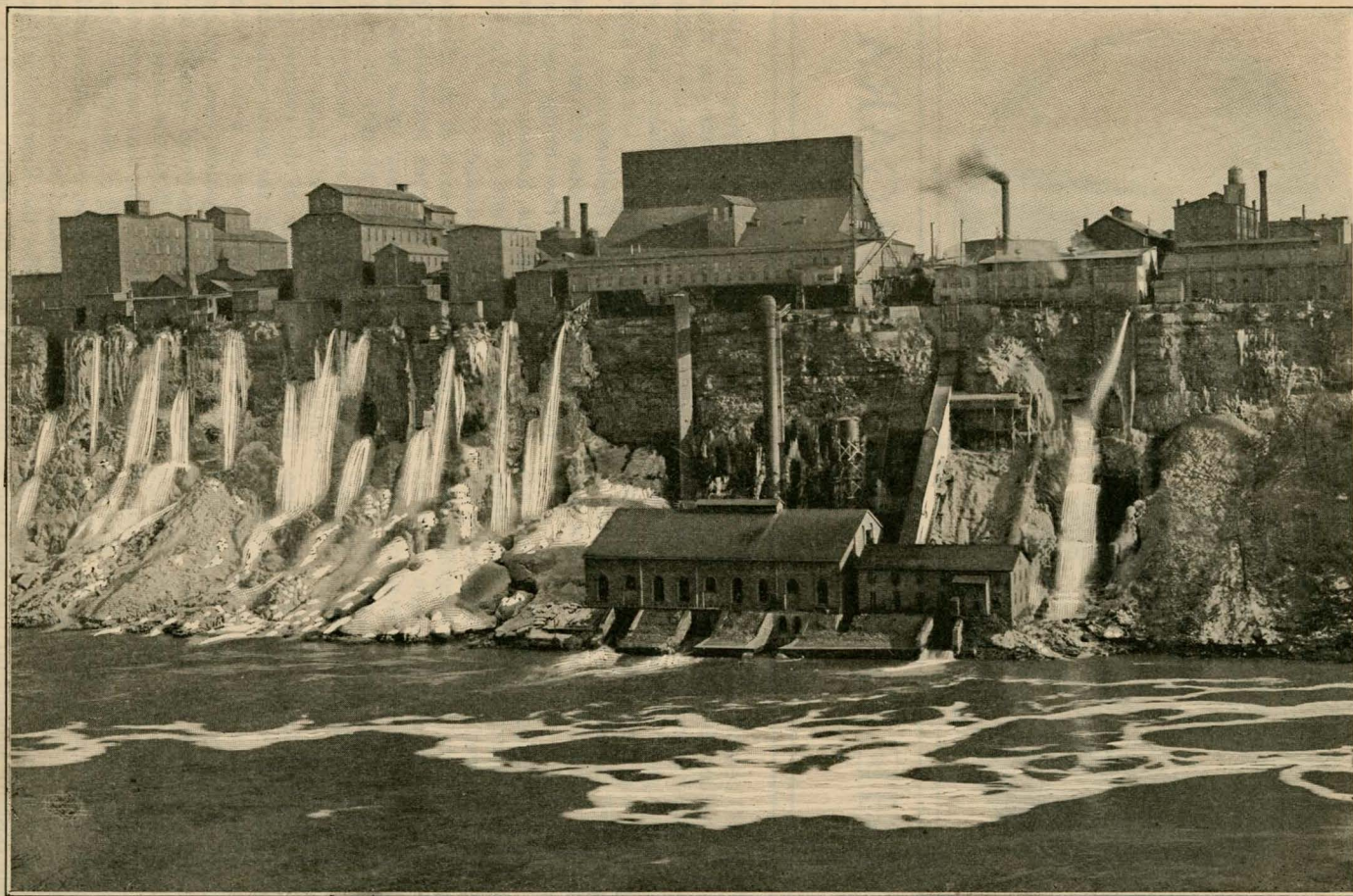
Time has changed all that. Gone are the mighty cedars, and gone with them the strong-winged eagles. In place of the cedar has sprung up the telegraph-pole. In place of the screaming eagle has come the shrieking trolley-wire. In place of the solitary Red Man have come scurrying hordes of pale-faced picnickers. The sardine has entered Paradise.

But why complain? We move, in fine. And if we have swept away the poetry of the natural, have we not more than replaced it by the wordless poetry of a machine age? Come and see. Yonder is the Queen's—alas, no!—the King's Dominion. Where that smooth plain of greensward stretches along the top of the Canadian bluff, there was once a dense, luxuriant cedar-swamp. Mark you now the toy trolleys crawling from one glaring white post to another on the high cliff's brow. So they crawl, through leafy forests down the deep-carved gorge, all the way to Queenstown, and up to the lovely

wooded Dufferin Islands lying in a sheltering elbow far up the hurrying river. Rough railway bridges cross the rushing water between these tiny islets, once an inviolate solitude, and till late strung together only by light footbridges.

So Canada. Now come with me across that graceful steel-arched bridge spanning the gorge, and let us, looking back from another country, behold what the Yankee has done with his heritage.

The mist-shrouded arch of the Horse-shoe Fall draws our eyes irresistibly upstream. It depends now upon how far into the past we look whether we speak in praise or blame. Going back to the days of La Salle and Hennepin, or even to the opening years of the century just past, we shall miss the giant oaks and the dense thicket of young trees and luxuriant undergrowth which once fringed the river bank and covered what is now Prospect Park. But if, on the other hand, we look back only to the time immediately preceding the opening of the reservation, in 1885, we shall miss, with indescribable exultation, a thousand sordid blemishes of the scene. For the Reservation Commissioners, with the scanty resources at their command, have accomplished landscape miracles. Bath Island, once the site of an obtrusive paper-mill, which



PHOTOGRAPH BY SMITH, NIAGARA

THE GREAT MILLS AT NIAGARA

These stand where the original "Bridal Veil" once flowed, as shown on the opposite page

thrust its hideous sluiceways and wing-dams into the very heart of the tossing American Rapids, is now a stretch of smooth green turf, generously planted with nursling trees, the metamorphosed place being rechristened "Green Island." Bazaars, curio-shops, and tintype galleries, which had crowded themselves into the very spray of the Falls, overhanging the rapids, and monopolizing, where they did not altogether obscure, the finest views of the river, have been swept away. The river bank above the Falls, for many years disfigured with ice-houses, mills, and unsightly factories, has been cleared, and the shore line restored as far as possible to its natural wooded condition, though not, alas! to any semblance of the glory of its primeval forests. Time alone can reproduce the original beauty of that cruelly mutilated bank. But the Commissioners have given time every opportunity to get to work.

Below the American Fall, one seems to remember, a slender stream of water used to overleap the high cliff wall and dash itself to finest spray before it reached the rocks below. We called it the "Bridal Veil." Innocent though it looked, that film of water was the prophecy of mighty things to come, of wealth to the village of Niagara Falls, of ruin to Niagara's matchless gorge. For that slender stream was the outlet of the canal of the Hydraulic Power Company.

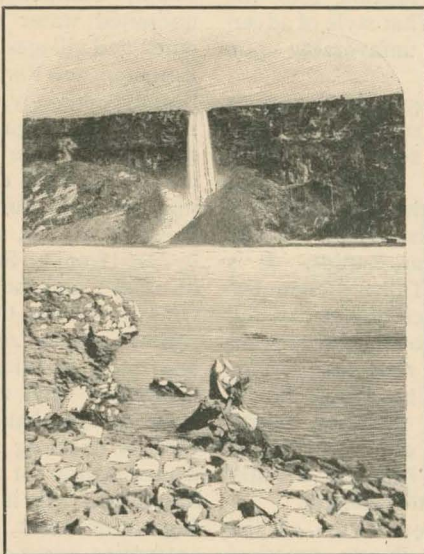
Look now for the innocent Bridal Veil. It has "multiplied itself by the hundred dozen." And alas for the cedar-grown, vine-draped cliff! Under the very shadow of the reservation, not two thousand feet from the plunge of the American Fall, huddles as foul and unsightly a milling village as ever dishonored a river's brink. Flush with the edge of the denuded cliff they stand, flouring-mills, aluminum works, breweries, and whatnot—hulking factories, advertisement-blazoned

sheds, shapeless rookeries. Down the discolored face of the cliff run certain exaggerated stovepipes, painted Indian red, called penstocks, and certain toy caricatures of Niagara, contemptible dribblets of waste water. On the naked débris-slope at the foot of the bluff, once clothed in the tenderest of mist-fed verdure, crouch two more factories, utilizing over again the water which has already turned the wheels of the mills above.

Instinctively one cries out in indignation, "Why is this allowed?" Allowed? Pray who is to prevent it? The cliff here is outside the jurisdiction of the reservation. Canada, rightly valuing her gorge, extended the line of official protection all the way down to Queens-

town. The American Commissioners recommended, it is true, that the bluff as far as the whirlpool become a part of the State park, but, niggardly counsels prevailing, the gorge was abandoned to its fate.

Come, let us take one of these yellow trolleys and see what that fate has been. Fresh from the sight of the Canadian cliff, forest-crowned, and softly wooded to the very water's edge, we are scarcely prepared



THE "BRIDAL VEIL" BEFORE DISFIGUREMENT

to relish the contrast between the Canadian and the American sides of the gorge. For, once as richly clothed as its vis-à-vis, the American cliff, where it is not wholly bald, has a ragged and moth-eaten appearance, the reverse of luxuriant. The forests have been torn from its summit for many a mile downstream; and it makes the matter no better to reflect that a mile strip of this bluff belongs to the Hydraulic Power Company, and that time will surely see it converted into a manufacturing district. From a point a little below the unbeautiful town of Suspension Bridge, a long, slanting line cuts athwart the steep face of the cliff from its summit to the water's edge. That is the trolley-track of the Gorge Railway. Certainly it

adds nothing to the beauty of the bluff, and one has an uncomfortable suspicion that the building of that road may have been in large measure responsible for the nakedness of the cliff. Not altogether responsible, however, for quite obviously there have been landslides. Whether or not landslides have been more frequent since the road disturbed the bank it may be rash to inquire. In any case, we might forgive much to the Gorge Railway for the sake of the marvelous views it makes possible. What we cannot forgive is the gratuitous insult of the vast, glaring signboard stretched on the perpendicular bank, down which letters of heroic size go marching Japanese fashion into the gorge—GORGE ROAD. That style of advertising deserves to react unfavorably upon its perpetrators.

If we permit the trolley which brings us back up the gorge to carry us on to Chippewa, we shall have seen the last of Yankee outrages upon the river. For Chippewa, as well as the upper end of Goat Island, commands a view of the river above the American Rapids. It is not a beautiful view. Tall red chimneys rise over a flourishing colony of low red factories, and trailing clouds of soot stain the sky and the smooth reflecting surface of the river. That is the Upper Power Plant, with attendant factories, which occupies the site of the old historic Fort Schlosser, dating from 1762, and the still older French fort of Little Niagara.

So much for the desecration of the scenery of Niagara. Purely practical people, I know, are a bit contemptuous of such protests as mine, regarding the æsthetic loss of the power plants as more than offset by the commercial gain. "If you will have an omelet," say they (meaning thereby, if you will have electric power), "you must break some eggs." That might, perhaps, be excellent reasoning had not the State already invested some two and a half millions of dollars in Niagara for purely æsthetic purposes.

But be that as it may. The point which next demands our attention is strictly a practical one. If it is worth while to have a waterfall at all (and the State of New York would seem to stand committed to that position), then it is manifestly desirable to have water enough to go over the falls. Yet that is the precise point which

the Legislature at Albany appears to have overlooked. For since 1886 it has been busily granting to all who asked practically unlimited right to divert the waters of the Niagara River above the Falls. Seven power companies have been organized since that date: The Niagara Falls Power Company, with the right to divert water sufficient to produce two hundred thousand horse-power, or 7,719,360 gallons per minute, or six per cent. of the total amount going over the Falls; the Lockport Water Supply Company, with the right to supply unlimited water to the city of Lockport and any town or village in Niagara County; the Niagara County Irrigation and Water Supply Company, with right to supply unlimited water to Lewiston and other cities and villages in the towns of Niagara, Lewiston, and Porter; the Lewiston Water Supply Company, amount unlimited; the Buffalo and Niagara Power Company, with the right to take unlimited water for domestic, sanitary, commercial, manufacturing, and agricultural purposes; the Model Town Company, with the right to divert by canal from La Salle an unlimited amount of water; and the Niagara, Lockport, and Ontario Power Company, authorized to supply water to Lockport and other villages and cities in Niagara, Erie, and Ontario Counties. And all these amazing privileges the open-handed State has dispensed without exacting so much as a penny in compensation for the enormously valuable franchises. It is no fault of the State Legislature that, for lack of capital or enterprise, some of these companies have allowed their charters to lapse, while others have been bought up by the Niagara Falls Power Company, so that but one company is in actual operation to-day—one, that is, besides the old Hydraulic Power Company, established in 1862, which originally held no grant from the State. In 1897, however, the thoughtful Legislature confirmed the claims of this company, thus intrenching behind impregnable rights that wretched milling village beside the Falls.

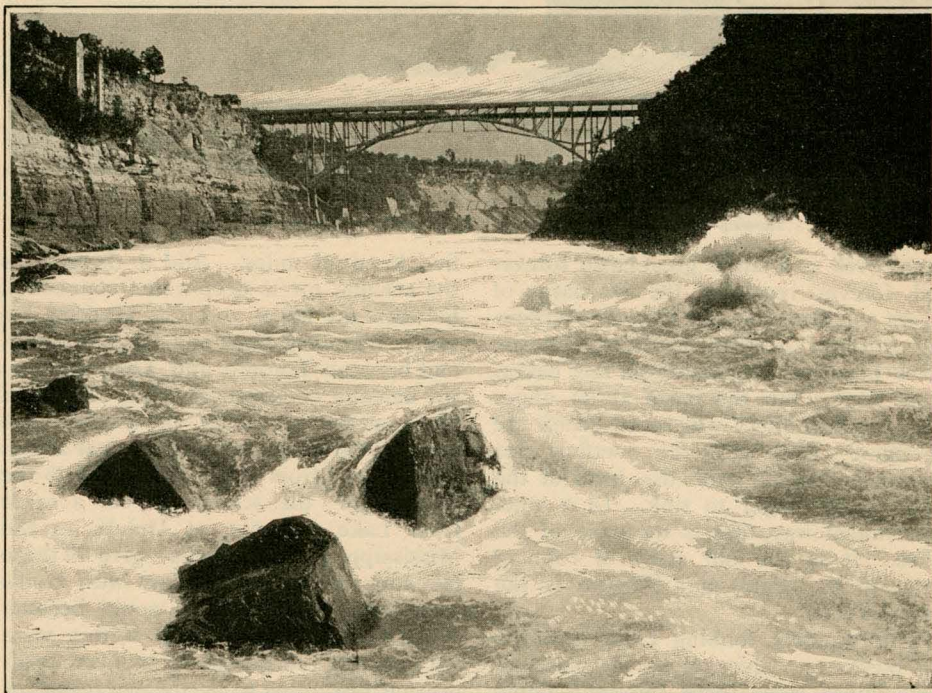
These two companies are at present taking from the Niagara River seven million three hundred thousand odd gallons of water per minute, or about six per cent. of the total flow over the Falls. When the Upper Company have exhausted their present limit, nine per cent. of the

river's water will have been turned aside before it reaches the Falls.

And the effect on the Falls? Superficial observers readily convince themselves that there has been a distinctly noticeable decline in the volume of the American Fall. Experts, however, juggling with mean depths, velocities, and percentages, assure us that the diversion of water into the power tunnels and canals has not reduced the depth of the crest of the fall to an extent appreciable to the

the Mist" have been necessary to enable her to land her passengers when the river is low. During a heavy gale last October, laden vessels were unable to make their piers at Tonawanda, so low was the water, while at Niagara bare rocks showed through the breakers of the American Rapids.

Expert calculations forbidding us to lay all this at the door of the power companies, we must look further for an explanation. Six hundred miles further it



COPYRIGHT, 1898, DETROIT PHOTOGRAPHIC CO.

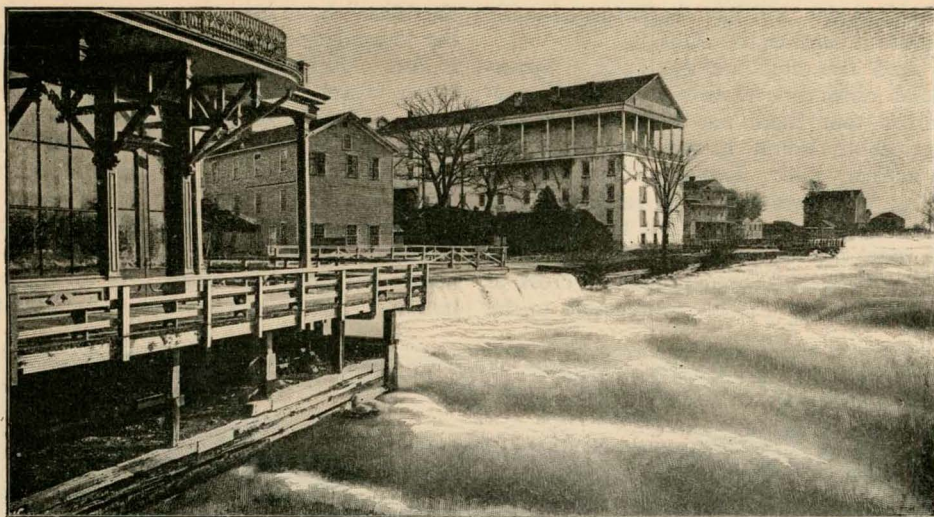
THE WHIRLPOOL RAPIDS

Showing the nakedness of the American bluff in contrast to the richly wooded Canadian bluff.

eye. And yet the superficial observers are right, too. The river *is* low, and in times of drought or unfavorable winds a phenomenally small amount of water goes over the American Fall. Proof of these lamentable facts are not wanting. For several years the lovely little fall between Goat Island and the first of the Sisters, known as the Hermit's Cascade, has been so nearly dry that last year it was necessary to deepen the channel above the cascade to restore the old volume of water and the original beauty of the fall. Furthermore, within the last few years alterations in the dock of the "Maid of

appears; for the foe of Niagara is, if I mistake not, the Chicago Main Drainage Canal. Nor am I unsupported by expert testimony in this matter. Mr. Willis Moore, of the United States Weather Bureau, at the close of his official tour of the Great Lakes, declared emphatically that the effect of the opening of the Drainage Canal had been, not, as so often said, to lower the level of the lakes, but to diminish the amount of water going over Niagara Falls.

The thing is simple enough when you think of it. Picture to yourself the four upper lakes, which are practically on the



THE SHORE ABOVE THE ISLAND BRIDGE

Showing the condition in 1879, before the reforms of the Niagara Commissioners

same level, as a single great basin, forever full, forever receiving the discharge of rivers and streams, and forever overflowing through Niagara to Lake Ontario, three hundred and twenty-six feet below. Now, if you tap the basin at its upper side, the first effect will be to check the overflow. Not until the overflow has altogether ceased will the level of the great basin begin to sink. In a quite untechnical way, that is the case of the lakes. It is the old story of robbing Peter to pay Paul, and Niagara is the woeful Peter.

Unfortunately, robbing Peter is tempting business. Chicago, having successfully filched some three thousand cubic feet of water per minute, now plans to extend her Drainage Canal—already an artificial river forty miles long, twenty-six feet deep, and three hundred feet wide—sixty-six miles further to the Illinois River, pouring into it a stream which will swell it to sixteen times its present volume. Engineering objections seem likely at least to delay the completion of this plan, which involves a deepened river channel as far as Cairo, and from there a cross-country cut to the mouth of the Mississippi. But this is not all. Canada, in furtherance of her little plot to divert the commerce of the Great Lakes to the St. Lawrence, proposes to carve out a deep waterway between Georgian Bay and the Ottawa River, thus shortening the lake route by

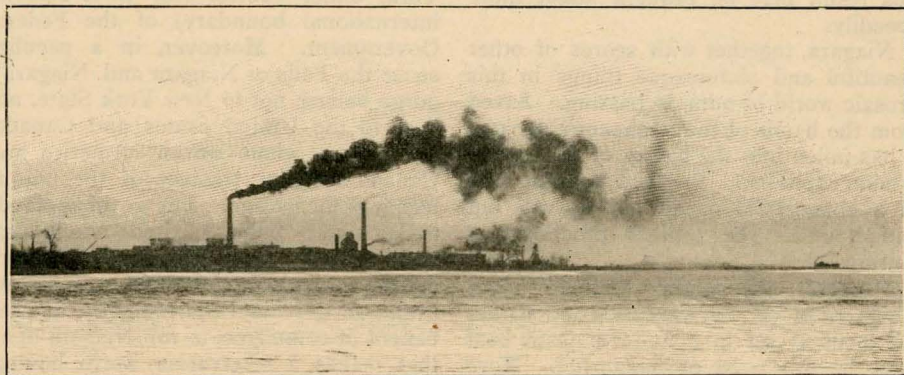
five hundred miles. Add to these plans the scheme for a deep-water connection between the lakes and the Hudson, between Winnipeg Lake and Lake Superior, and between Toronto and Lake Huron; the demand of Pittsburg and Cincinnati to be made (by proxy of canals) lake ports; Wisconsin's plea for a canal across her borders from Lake Michigan to the Mississippi; the scheme to cut a canal from Lake Superior at Duluth to the Mississippi at Minneapolis—give all these lake-tappers, these meddlers with God's map, their way, and what would become of the Niagara River? As if this were not enough, the genius of modern engineering, beginning to see the evil results of the tapping process, proposes to mend the mischief by a plugging process. That is, they propose to raise the lowered level of the Great Lakes by damming the Niagara River at the head of the rapids, or at Buffalo, or both. Mr. Moore, whose lake wisdom I have already quoted, says that were the Niagara dammed so that the four upper lakes had no outflow, he does not believe that their level would be really affected. But whether or not the projected dam would raise the level of the lakes, it would assuredly lower the level of Niagara, and during the dry season at least practically drain Niagara Falls. The most hopeful feature of the case is the multitude of plotters and amateur geographers, for they cannot assuredly all be

satisfied without making of our inland seas a great American desert. The time must come when an international protest will call a halt. But will it come soon enough to save Niagara?

Although their foster fathers at Albany have cast them off, the falls are not altogether without friends. The men who fought so valiantly for the rescue of Niagara from swindlers and showmen in 1884-5 are fighting as valiantly now for the river's very existence. Perhaps Niagara Falls has no more whole-hearted champion than the venerable President of the Commission of the State Reservation—Andrew H. Green, the "father of Central Park." From the first he has strenuously opposed all encroachments upon the reservation and all injuries to the river. First it was the Gorge Railway, which proposed to cut the débris slope within the limits of the reservation. Then, in 1889, it was the Hydraulic Power Company, which asked of the Legislature the right to place turbines in the very heart of the American Fall. They proposed to turn aside the water where it rolls over the precipice at Prospect Park; then, by blasting, to construct a vault or cave in the rock and behind the fall. Here were to be placed dynamos to be operated by water descending through a tube or well upon turbine wheels. That audacious proposition was actually reported favorably in both Houses, but it was side-tracked for that session and eventually defeated. From the granting of the charter of the Niagara Falls Power Company in 1886, the Commissioners have exhausted themselves in efforts to persuade the lawmakers that

they had no right to grant away without compensation what belonged to the people, and that by so doing they were endangering the very existence of the Falls of Niagara. But to no purpose. Almost every session saw the passage of fresh grants. Convinced at last that the Legislature was completely under the influence of the corporations, Mr. Green pushed his efforts further back. In 1894 a convention was held to revise the State Constitution, and to this body Mr. Green offered a resolution looking toward the appointment of a committee to consider the advisability of an amendment to the Constitution preventing the diversion of Niagara's water above the Falls. The resolution passed; the committee was appointed, and, after investigation, presented to the Convention a vigorous and convincing report, calling the attention of that body to the fact that the reservation had cost the State \$2,500,000, that not a penny of revenue was accruing to the State from the valuable franchises granted, and protesting that "if corporate and individual ambition be not checked and made subject to public rights, there was certainly danger that the Falls of Niagara, like the Falls of Minnehaha, may live in the tradition of song and story, but will be sadly deficient in the amount of water flowing over their brink;" and closed by proposing an amendment restraining the Legislature from granting to corporations or individuals the right to divert the waters of the Upper Niagara. Through the extraordinary efforts of the corporations interested, this amendment was defeated.

Disappointed, but by no means crushed,



THE GREAT MILLS AT A DISTANCE

Mr. Green rallied his forces and carried his case to a higher court. Since the Legislature would not restrain the corporations, nor the revisional convention the Legislature, there was no resource save an appeal to the Federal Government. Realizing, however, that restrictive action on this side the river would but serve to drive the corporations across into Canada, where a grant of two hundred thousand horse-power has already been made, it was not only for National but for international intervention that he looked.

But even should an international protectorate be established, one mighty threat would still overhang Niagara. For not only man but Nature is in conspiracy against her. This continent of ours, this firm and solid hemisphere, is gradually, leisurely tilting—rising on the north and east, and falling on the south and west. Eventually, unless the continent should change its mind, the Great Lakes will be forced to seek a new outlet by way of the Illinois River to the Mississippi, and the Niagara River will be dry. The continent is in no hurry about it. Scientific schedules vary so that one cannot be very precise. But about two thousand years from now the Illinois River and the Niagara will compete about equally for the waters of the lakes. Twenty-five hundred years from now Niagara will have but an intermittent flow, and in three thousand years the current in the Detroit and St. Mary's Rivers will be reversed; Lake Erie will flow into Lake Huron, Lake Huron into Lake Michigan, and the Niagara River will be a thing of the past. With the aid of artificial canals, it is even possible that this result may be brought about more speedily.

Niagara, together with scores of other beautiful and picturesque things in this prosaic world of ours, is passing. Saved from the hands of the catchpenny sharper, it has fallen into the hands of the catch-million capitalist. Rescued from the toils of a commercial conspiracy, it will but vanish under the pitiless processes of Nature.

However, the mighty geologic clock which ticks off the centuries and strikes the æons is set to a more majestic beat than the tiny pulse of human life. If we can save Niagara for our children's children's children, it is worth fighting for.

Even should the friendly measure become a law, it may require a vigorous public sentiment to see to its enforcement. Past experience would seem to indicate that the power companies will get about what they want about when they want it. And if, as the perfection of electrical science makes a cheapened power more widely in demand, the power companies want what is distinctly prejudicial to an already lowered river, it will be well even for an international commission to have the reinforcement of an awakened public opinion. The coming summer, with its exposition on the Niagara frontier, will give millions of people of the United States and Canada an opportunity to see for themselves what is going on at the Falls, and to form their own opinion of the merits of the case. Every effort will be made to confine the visitor's attention to the vast commercial significance of the "harnessing of Niagara." But if the people refuse to be hypnotized by the talk about water power going to waste, etc., they will meet the commercial spirit with the commercial spirit, saying, "Behold all this horse-power going to waste! In New England they charge for the use of river water at the rate of \$25 to \$75 per horse-power. At the rate of even *five* dollars per horse-power, the water running through these power tunnels and canals ought to bring the State a million dollars a year, enough to pay for the State Reservation in two years and a half. The gentlemen of these corporations do not own the river. Nor is it a public stream. It is in a legal sense a navigable river, and as such the property of the State of New York, under control (for it is also an international boundary) of the Federal Government. Moreover, in a peculiar sense the Falls of Niagara and Niagara's gorge belong, not to New York State, nor even to the United States and Canada, but to the whole world. America and Canada are joint trustees of the unique legacy of the ice age. The world applauds to-day their public-spirited administration of the trust. But if they permit private individuals, for their own private profit, or individual States for the avowed benefit of commerce, to rob Niagara of all that makes a reservation worth having, they will deservedly win the derision of nations.

4-5-1901